

“Attending to the details “ - Workflow Management System -

Introduction

Employees of any enterprise need not only to be able to access necessary information and effectively use **electronic communication** tools, but also need the ability and support to be able to integrate technology into their everyday work. The use of IT is vital for any **work environment** where personal communication between all parties is not feasible. As employees become more dependent on **information systems**, the need for continually available technical support becomes more evident, and these problems need to be resolved as fast as possible. A large part of these problems arise from **inter-operational problems with heterogeneous systems**, and unsuitable, or difficult to understand processes and system functions. In such an environment the work processes (workflow) become difficult to follow, and even more difficult to supervise and control. Consequently the risk of data loss and errors increases, with this chaos in extreme cases even hiding systematic errors or purposeful sabotage.

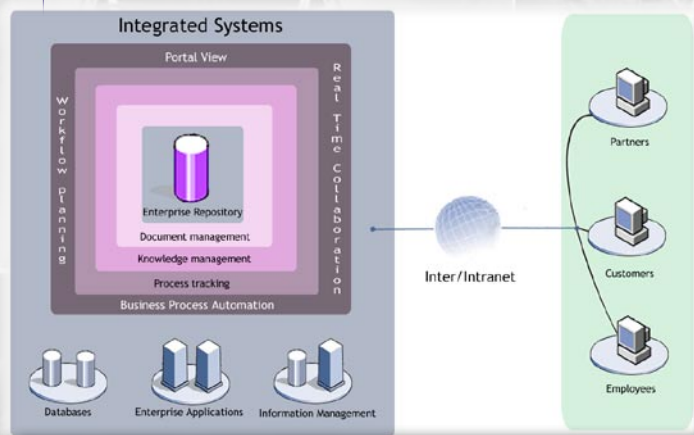
The SANity™ Wflow is a comprehensive alternative system where you can always know how a given process stands, what time costs, and **thus project costs** can be associated with it, when the specified **deadline** is, which user is currently working on it, or blocking the process, who was the last to modify the document etc... SANity™ Wflow ensures that **data will not get lost**, and reaches precisely those who require it.

High-level process planning

Previously planned and applied **processes can be rethought and modified** at any time (BPR- Business Process Re-engineering). Modified processes are traced by the system, and modifications are carried on on running processes if necessary. **Process planning** and necessary modifications can only be carried out by users with system permissions allowing them to do so, which means that the system reflects the current needs of the enterprise, allowing it to function in an orderly and **cost-effective** fashion.

Deadline, cost and resource tracking

Relative deadlines, planned times, **expected costs** and other freely definable resources can be assigned to each workflow. **Reports generated** by the SANity™ Wflow system allow you to track and control the **business processes**. You can see view the current status, and examine any **deviation between planned and real values** at a given milestone. With the ability to **analyse activities**, they can be **optimized** which in some cases will allow the company to significantly increase it's capacity.



Object based resource management

Each **resource** managed in the SANity Wflow system is handled as an object which can be grouped with other objects, which **groups can then further be grouped**. Each group can then be assigned a range of properties which will facilitate their distribution and management. The advantage of this approach is most evident when **changes to given workflow require redistribution/regrouping of resources**. With this resource management ability, well planned and constructed resource assignments can **easily be changed and rescheduled** while the final result of the process (or project) is unaffected.

The other significance of **managing grouped resources** is the ability to automatically reallocate resource assignments within a process. In practice that means that if an element of the group – e.g. a **human resource** – is unavailable, that person's tasks can automatically be reallocated evenly among the remaining members of that resource group, maintaining a balanced workload for this **workflow process**.

Comprehensive Work flow management

All internal and external activities can be easily planned and represented in the SANity™ Wflow **process management** system. As a result, you receive understandable, **clear and simplified business processes** wrapped in a standardized system.

Document management solutions

The concept of **workflow management** is linked with that of document management. During normal work, many problems are caused by incorrect **document management**. SANity™ Wflow is capable of handling document management at two levels, either separately or together

Image based document management

An “image” of the document is stored and tracked through the system. During the **workflow**, the individual processes use these “images”. The **advantage of this system** stems from the fact that these documents are read-only, and **reduces the need for multiple paper copies of a document**. The disadvantage of image based storage is that the documents are not searchable and no statistics or additional information can be gained from them.

Template-based document management

Documents entering the system are stored in a template. Each template contains the document itself, a **file in text format containing the full text** (usable for searches), and meta-data associated with the file (author,date/time, digital signature, topic etc.)

The other important property of the template is that it enable **version management**. The template stored the original file, and at each stage in the workflow the modified file is stored, while previous versions are also retained. In this way, the entire life-cycle of the document can be traced through the SANity™ Wflow system.

Workflow communication

The SANity™ Wflow system provides several tools for **communication** between participants in a workflow process.

Wflow portal: After a user has identified himself to the system and logged on, he can **receive a customized view of his current status**. The user he will be able to access those system functions and data for which he has permission. Similarly, for the current workflows that the user participates in, he is notified of tasks waiting to be performed by him, or his resource group. The portal will also provide **notifications concerning upcoming deadlines**, overdue tasks etc, and again dependent on the permissions of the user - information on blocked processes and system state (workflows in process, status etc.)

Email: In some workflow processes or projects it is not feasible for every **participant to have a direct connection** to receive information from the system (for security or other reasons). To deal with this, the SANity™ Wflow system has an integrated email notification system.

SMS: The SMS based communication subsystem is similar to the e-mail solution in that users not directly in contact with the system receive notification of events, tasks, deadlines. This increases mobility of participants since they will know when they are required. The **SMS system** uses additional hardware to send these messages.

Security, Access control system

Depending on the area in which it is to be used, a workflow system can be completely **open and simple** (just providing information on the workflows and contained activities), or it can be an integrated system that satisfies rigorous security requirements, possibly using encrypted data and communications. Due to its **object oriented** construction, each element of the system, and every actor has a so-called **permissions level**. When elements come into contact with each other (e.g. A certain user requests a given document), the system checks whether that connection meets the established parameters. In practice this can be implemented in a much easier fashion: A document group is assigned to a **workflow**, and users only receive permissions to those workflows which belong to their assigned tasks.

Distributed load, scalable performance

Due to the **J2EE technologies** used, the SANity™ Wflow system has minimal initial hardware requirements. If the system needs to be expanded (e.g. A lot more **users** are expected, or significantly more processes are needed than initially planned), you can simply add additional SANity™ **Wflow servers** to the cluster. Transparently to the user, the individual systems elements will distribute the workload over these servers and continue to perform their tasks.

System integration and optional components

The SANity™ Wflow system was developed so as to be both **manufacturer and platform independent**. In addition to not locking the customer into any platform or hardware, it can **easily be integrated** with existing systems.

This ease of integration allows CLARMONT I.S. Ltd to offer the **following add-on modules** for the SANity™ Wflow system.

- Encrypted data storage and communications using **RSA, SSA** processes.
- **Biometric (fingerprint based)** or chip card systems to block unauthorized access.
- **BD DVD Storage Jukebox** units for large capacity, long term data storage.
- Equipment to allow the SANity™ Wflow system to **automatically send SMS messages**.
- Complete support for use and management of **digital signatures**.